

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2004/013665

International filing date (day/month/year)
02.12.2004

Priority date (day/month/year)
02.12.2003

International Patent Classification (IPC) or both national classification and IPC
A23G1/00

Applicant
NESTEC S.A.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/013665

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2004/013665

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or
Industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-23
	No: Claims	
Inventive step (IS)	Yes: Claims	1-23
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-23
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V.

Reference is made to the following documents:

- D1 : EP 0 393 327 A (LOTTE CO., LTD) 24 October 1990 (1990-10-24)
D2 : EP 0 688 506 A (SOCIETE DES PRODUITS NESTLE S.A) 27 December 1995
(1995-12-27)

1. Document D1, which is considered to represent the most relevant state of the art, discloses (relevant passages see search report) a heat-resistant chocolate formed by dispersing and mixing a water-in-oil emulsion and a chocolate base. The W/O emulsion, i.e. tropicalizing agent, is formed by dissolving a saccharide or a sugar alcohol in water and adding oils and fats and an emulsifier. It is clearly stated in D1 that the heat-resistance is not shown immediately after production, but that the water is released more gradually.

From this, the subject-matter of independent claim 1 differs in that the tropicalizing agent has a specific structure, i.e. dispersion of gel beads, comprising the polyol/sugar with water and the emulsifier, in the liquid fat phase.

The subject-matter of claim 1 is therefore novel (Article 33(2) PCT)

The problem to be solved by the present invention may be regarded as to provide an alternative tropicalizing agent.

D2 (relevant passages see search report) discloses polyol or polyol/water gel products as tropicalizing agents. The gel beads are however not dispersed in a liquid fat phase by use of an emulsifier. It is further stated in D2 that the polyol diffuses gradually out of the gel.

In D1 there is no indication that gel beads can be formed and in D2 nothing is said about the possibility of dispersing the gel beads in a liquid fat.

It is therefore not obvious for a skilled person to combine D1 and D2. The subject-matter of claim 1 is considered to be inventive (Article 33(3) PCT) over the cited prior art.

2. Consequently, the chocolate comprising the tropicalizing agent of claim 1 (**claims 8 and 9**), the process for preparing the tropicalizing agent (**claim 10**) and the process for tropicalizing a chocolate by using the agent of claim 1 (**claim 15**) are also novel and inventive, as are the dependent claims 2-7, 11-14 and 16-23.

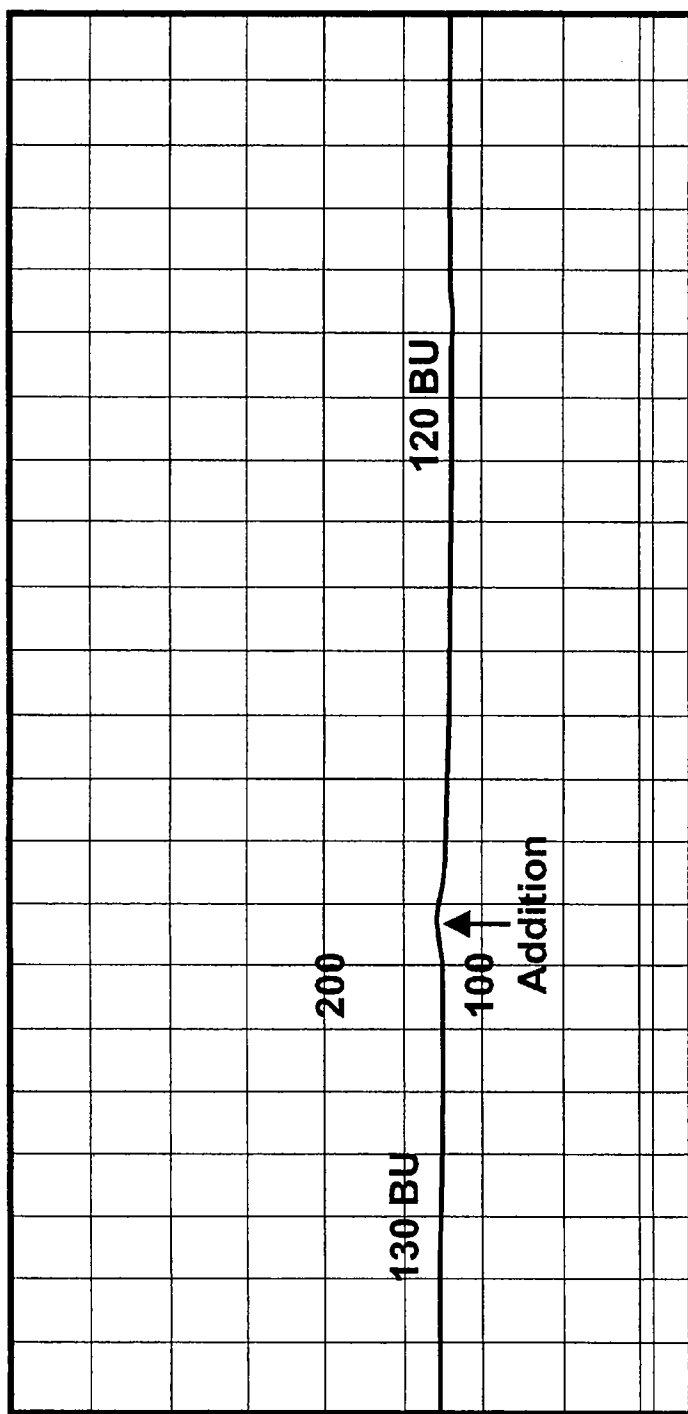


Fig. 1

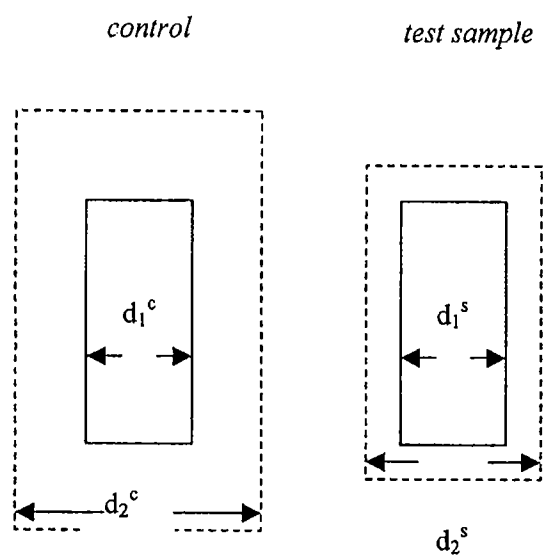


FIG. 2

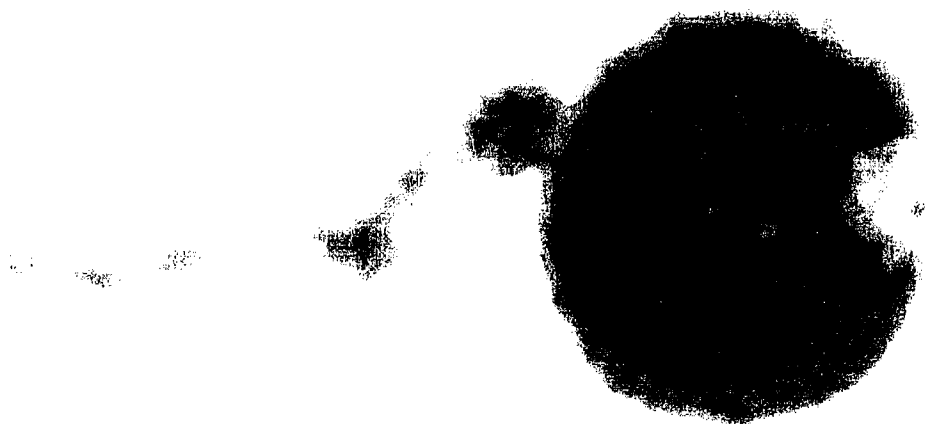


FIG. 3